UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,988	05/25/2001	Prashanth B. Bhat	10130-017-999	5844

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EXAMINER
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ART UNIT	PAPER NUMBER
2127	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _25 May 2001_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-39_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-39_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　Paper No(s)/Mail Date _08/06/01_.

4) ☐ Interview Summary (PTO-413)
　Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-39 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

   a.   A patent may not be obtained though the invention is not identically disclosed or described as set forth
        in section 102 of this title, if the differences between the subject matter sought to be patented and the
        prior art are such that the subject matter as a whole would have been obvious at the time the invention
        was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability
        shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 13-16, 25-31 are rejected under 35 U.S.C. 103(a) as being obvious over Van

Dort (6,148,003) in view of Maruyama et al (6,353,847) (hereinafter Maruyama).

4. As per claim 1 Van Dort teaches a method for choosing a resource, among a plurality of

resources, for selecting a request, comprising:

randomly selecting a first resource among the plurality of resources in accordance

with a predefined first random selection function (col. 10 line 47 –col. 11 line 13, Fig. 4).

5. Van Dort does not specifically teach the use of different load values.

Maruyama teaches the first resource having an associated first load value (fig. 7, col. 1

lines 51-56);

comparing the first load value to a predetermined threshold value to determine

whether the first load value exceeds the predetermined threshold value (col. 7 lines 23-

28, col. 2 lines 7-13); and

upon determining that the first load value does not exceed the predetermined threshold

value, assigning the request to the first resource for servicing the request (col. 7 lines 29-

33, col. 2 lines 20-22).

6. It would have been obvious to one skilled in the art at the time of the invention was made

to combine the teachings of Maruyama and Van Dort because Maruyama's method of

assigning and comparing load values to resources would improve Van Dort's system of

distributing different resources by being able to tell with resource has exceeded its

predetermined threshold value.

7. As per claim 2, Van Dort teaches a method including,

randomly selecting a second resource among the plurality of resources in accordance with

a predefined second random selection function(col. 10 line 47 –col. 11 line 13, Fig. 4).

Maruyama teaches a upon determining that the first load value exceeds the predetermined

threshold value (col. 7 lines 29-33, col. 2 lines 20-22);

comparing the second load value to the predetermined threshold value to determine

whether the second load value exceeds the predetermined threshold value(col. 7 lines 29-

33, col. 2 lines 20-22); and

upon determining that the second load value does not exceed the predetermined threshold

value, assigning the request to the second resource for servicing the request (col. 6 lines

15-21, col. 1 lines 57-60).

8. As per claim 3, Maruyama teaches a method including, upon determining that the second

load value exceeds the predetermined threshold value:

comparing the first load value to the second load value and assigning the request to one

of the first resource and second resource having a lower associated load value for

servicing the request (col. 2 lines 18-28, col. 1 lines 52-56).

9. As per claim 4, Maruyama teaches a method further comprising:

determining whether the first resource is unavailable for selection(col. 7 lines 29-33, col.

2 lines 20-22); and

upon determining that the first resource is unavailable for selection, determining which of

the plurality of resources are available for selection and redefining the plurality of

resources to include only those of the plurality of resources that are available for selection

(col. 6 lines 15-21, col. 2 lines 7-22).

10. Claims 13-16 and 28-31 are rejected based on the same rejections as claims 1-4 above.

11. As per claim 25, Van Dort teaches a method for randomly selecting a first resource

among the plurality of resources in accordance with a predefined first random selection

function (col. 10 line 47 –col. 11 line 13, Fig. 4)

Maruyama teaches a method of assigning a load value to a plurality of resource (col. 7

lines 23-28, col. 2 lines 7-13); and

selection function when the first load value exceeds the predetermined threshold value,

determined whether a second load value associated with the second resource(col. 6 lines

15-21, col. 1 lines 57-60).

12. As per claim 26, Maruyama teaches a system among a plurality of resources, for

servicing a request, comprising:

one or more interfaces for receiving a request and for forwarding the request to a selected

resource(col. 7 lines 29-33, col. 2 lines 20-22);

exceeds the predetermined threshold value, and assign the request to the second resource

for servicing the request when it is determined that the second load value does not exceed

the predetermined threshold value (col. 6 lines 15-21, col. 1 lines 57-60).

13. As per claim 27, Maruyama teaches a system wherein the control logic is further

configured to assign the request to whichever of the first and second resources has a

lower associated load value when the second load value exceeds the predetermined

threshold value (col. 6 lines 15-21, col. 2 lines 7-22).

14. Claims 5-12, 17-24, 32-39 are rejected under 35 U.S.C. 103(a) as being obvious over Van

Dort (6,148,003) in view of Maruyama et al (6,353,847) (hereinafter Maruyama) in

further view of Levy et al (6,546,454) (hereinafter Levy).

15. As per claim 5, Van Dort teaches a method for randomly selecting a first resource among

the plurality of resources in accordance with a predefined first random selection function

(col. 10 line 47 –col. 11 line 13, Fig. 4) and Maruyama teaches a method of assigning a

load value to a plurality of resource (col. 7 lines 23-28, col. 2 lines 7-13) as taught in

claim 1 above.

16. Van Dort and Maruyama do not specifically teach the use of a one-way hash.

Levy teaches a method wherein the randomly selecting is performed by applying a

one-way hashing function to the request to generate a first intermediate value, applying a

modulo function to the intermediate value to generate a second intermediate value (col. 7

lines 30-37, col. 7 lines 59-67); and

applying a mapping function for mapping the second intermediate value so as to select

the first resource from among the plurality of resources (col. 7 lines 40-48).

17. It would have been obvious to one skilled in the art at the time of the invention was made

to combine the teachings for Levy to Van Dort and Maruyama because Levy's system of

verifying the resource availability would improve Van Dort and Maruyama's system by

being able to identify and properly verify the resource requested.

18. As per claim 6, Maruyama teaches a method wherein the modulo function applied has a modulus whose value corresponds to a total load capacity of the plurality of resource (col. 1 lines 50-60, col. 7 lines 23-32).

19. As per claim 7, Maruyama teaches a method wherein each of the resources of the plurality of resources has an associated respective load capacity (col. 7 lines 23-32); and the mapping function is a probability density function in which each resource in the plurality of resources has a mapping range whose size corresponds to the respective load capacity associated with the resource (col. 1 lines 50-60, col. 7 lines 23-32).

20. As per claim 8, Maruyama teaches wherein each of the resources of the plurality of resources has an associated respective load capacity (col. 1 lines 50-60, col. 7 lines 23-32); and the mapping function is a weighted mapping function that is weighted in accordance with the respective load capacities associated with the plurality of resources(col. 1 lines 50-60, col. 7 lines 23-32).

21. Claims 9-12 are rejected based on the same rejections as claims 5-8 above.

22. Claims 17-24 and 32-39 are rejected based on the same rejections as claims 5-12 above.
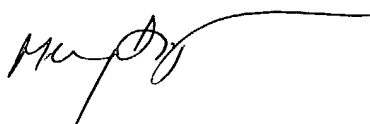
Conclusion

23. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nilesh Shah whose telephone number is 703-305-8105.

The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, meng An can be reached on 703-305-9678. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

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more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

                                            Nilesh Shah
                                            Examiner
                                            Art Unit 2127

NS
August 17, 2004

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                                            SUPERVISORY PATENT EXAMINER
                                            TECHNOLOGY CENTER 2100